

Factsheet

ANIMAL HEALTH AND SUSTAINABILITY

Key Messages

Healthier cows means lower emissions. Healthier cows produce milk more efficiently and for longer, reducing greenhouse gas emissions per litre of milk.

Common health problems increase emissions. Conditions like lameness, mastitis, and ketosis increase emissions by reducing milk yield and increasing the need for treatments.

Longer cow lifespans is one way to reduce resource use. Healthy cows that live longer reduce the need for replacements, saving resources like feed and energy. However, focusing on overall health and productivity, not just longevity, is the key to sustainable farming.

Health management is key. By preventing disease, detecting issues early, and improving cow health and welfare, farmers can enhance both sustainability and profitability.

Why Cow Health is Important for Sustainability

Sustainability isn't just about the environment: it's also about keeping farms running smoothly and benefiting the community. Here's how animal health plays a role:

ENVIRONMENTAL

Healthy cows need less feed, water, and energy to produce the same amount of milk, reducing environmental impact.

ECONOMIC

Fewer sick cows means less money spent on treatment, better productivity, and cows that last longer, saving money long-term.

SOCIAL

Keeping cows healthy shows the public that farmers are committed to responsible practices, which is important to today's conscientious buyers.

Understanding Emissions in Dairy Farming

Environmental sustainability focuses on **greenhouse gas (GHG) emissions**—gases that trap heat in the atmosphere and contribute to climate change. These include **carbon dioxide (CO₂)**, **methane (CH₄)**, and **nitrous oxide (N₂O)**.

ABSOLUTE EMISSIONS

The total amount of GHG a farm produces over a period of time.

EMISSIONS INTENSITY

Measures the GHGs produced per unit of milk. Lower emissions per litre indicate a more environmentally efficient farm.

How Health Conditions Impact Emissions

Here are a few examples of the impact of health conditions on emissions:



LAMENESS

Cows with foot issues like digital dermatitis or sole ulcers can cause emissions to rise by **up to 7.8% per kg of milk** due to lost production and extra treatments.¹



MASTITIS

Preventing mastitis can **cut a cow's emissions by 6.2%**.² Reducing subclinical mastitis can **lower a farm's total emissions by up to 3.7%**.³



KETOSIS

This metabolic disorder in cows **increases emissions by 2.3% per case** because it reduces milk production and requires extra care.⁴

Measuring emissions under specific conditions and modeling their environmental impact is challenging. As this is a relatively new field of study, current research is limited, but efforts are ongoing to expand our understanding.



How Improving Cow Health Cuts Emissions

Healthy cows produce milk more efficiently, meaning less energy and fewer resources are used. Here are a few ways cow health directly impacts emissions:

REPRODUCTION

Improving reproductive health can cut emissions by maximizing the productive period of a cow's life, increasing productivity, and reducing resources spent on non-productive animals or raising replacements.

YOUNGSTOCK MANAGEMENT

Proper calf care, including adequate colostrum intake and disease prevention, helps calves grow into healthy and productive cows. This reduces costs by minimizing the need for replacements and improving farm efficiency.

BETTER DIGESTION

Healthier cows digest feed more efficiently, leading to less methane production.

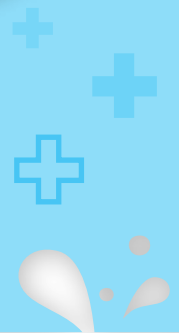


The Impact of Cow Longevity

Raising replacements requires significant resources. Longer cow longevity means greater lifetime milk production, helping offset these early costs. However, while cow longevity is important, it's just one piece of the puzzle. Healthy cows with good reproductive management are the key to sustainable farming. Don't just focus on keeping cows around longer – **their overall health and productivity are what matter most.**

The Role of Veterinarians and Advisors

- ✓ **PREVENTING DISEASE**
Providing guidance on disease management to avoid costly treatments.
- ✓ **EARLY DETECTION**
Catching problems early to help prevent bigger health issues and reducing the need for antibiotics and treatments.
- ✓ **OPTIMIZING HEALTH MANAGEMENT PRACTICES**
Encouraging better care practices across the cow's lifecycle to improve overall health and farm sustainability.



The Bottom Line

Healthy cows mean healthier farms—environmentally, economically, and socially. By focusing on improving cow health at all stages of life, from calf to mature cow, farms can reduce greenhouse gas emissions, increase productivity, and ensure long-term sustainability. Investing in better health management boosts productivity and strengthens the sustainability of the dairy industry.

References

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